Title:
Postpartum Smoking Cessation and Its Related Factors

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Rising Stars of Research and Scholarship Invited Student Posters

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References:
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Abstract Summary:
Within the first year after childbirth, up to 80% of women who quit smoking during pregnancy resume smoking. Identification of smoking trends and variables that predict remaining smoke free at 12 months postpartum provides useful information for future research on development of nursing interventions to support remaining smoke free postpartum.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Discuss the current state and problem of postpartum smoking relapse.	Background information provided on current state of smoking relapse. Problem will be identified through supportive statistics of the problem.
Identify potential avenues for future research to support remaining smoke-free postpartum.	Identification of predictive factors associated with being smoke free 12 months post-delivery. Will provide foundation for future research on effective nurse interventions to support smoking cessation and maintenance in the pregnant/postpartum population

Understand how the theoretical constructs for this dissertation study are operationalized.	Discuss the theoretical constructs underpinning the design of the study. Operationalized background variables, perceived behavioral control, and the behavioral outcome of smoking cessation.

Abstract Text:

Background and Goals. Smoking during and after pregnancy has negative health consequences for the smoking mother as well as the health and development of the child from exposure both in the womb and after birth. Smoking cessation research has been focused on prenatal intervention with minimal follow up into the extended postpartum period (defined here as birth to 12 months after delivery). Still, 12.3% of women smoke at the end of pregnancy and 17.2% report smoking 4 months postpartum (Centers for Disease Control and Prevention [CDC], 2013), suggesting an increase of 40% in smoking prevalence between the key time points. Additionally, smoking resumption by 12 months postpartum ranges from 40% up to 80% (CDC, 2013; Coleman-Cowger, 2012). The purpose of this study is to identify trends in smoking status up to 12 months postpartum for women enrolled in a national evidence-based home visitation program, and identify variables during pregnancy and at birth that predict smoking status 12 months postpartum.

Methods. This study is theoretically grounded in the Integrated Model of Behavioral Prediction (Fishbein, 2009). A secondary data analysis with a correlational predictive design will be used. The study sample is from a national evidence-based home visitation program, which has a current enrollment of 32,474 families across 594 counties in 42 states plus the U.S. Virgin Islands. Inclusion criteria for this secondary data analysis are first time pregnant women enrolled in the program between the years of 2011-2016 with: (1) a history/current use of cigarettes upon enrollment; and/or (2) report of cigarette use during pregnancy on the health habits assessment at 36 weeks gestation. Additional inclusion criteria are: (1) completion of at least 12 months of the program after birth; and (2) completion of the Pearlin Mastery scale at program intake. Based upon inclusion criteria, we anticipate a final sample size of approximately 3,000 women. Smoking status is examined during pregnancy and 12 months postpartum by asking participants how many cigarettes they have smoked in the past 48 hours. Potential correlates include sociodemographic variables, depression, and personal control beliefs. The Edinburgh Postnatal Depression Scale is a 10-item, 4–point Likert response option scale that assesses depression at birth and 12 months postpartum. The Pearlin Mastery Scale is a 7-item, 4-point Likert response option scale that assesses self-mastery, a defining attribute of personal control beliefs. Descriptive statistics will be performed to assess means and percentages of study sample and identified variables. Correlation analysis and regression models will be conducted to identify possible correlations between demographic variables, depression, self-mastery, and the behavioral outcome of being smoke free at 12 months postpartum. Multivariate statistics will be conducted to support predictive design. The dependent variable of smoking status will be examined during pregnancy and 12 months postpartum. Independent variables will be examined during pregnancy, at birth, and at 12 months postpartum.

Findings. Results of this study will identify predictive factors associated with smoking cessation at 12 months postpartum. The magnitude and direction of the relationship of each variable (i.e. sociodemographic factors, depression and personal control beliefs) will be assessed. Combined effects of predictors on smoking status and model fit will be assessed.

Conclusion. This study will provide a foundation for future research regarding development of effective nurse interventions to support smoking cessation and maintenance specific to the population of pregnant and postpartum women by identifying possible correlations and predictive variables for being smoke free postpartum.